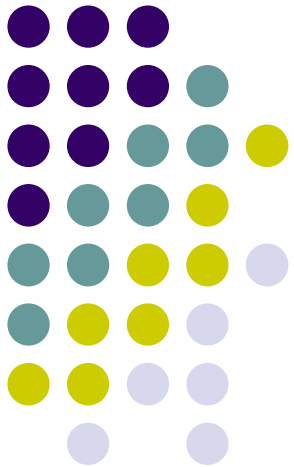
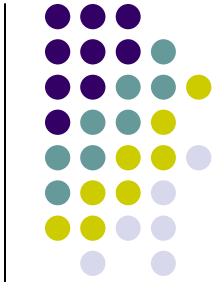
CHCS

TC2



TC2 Overview



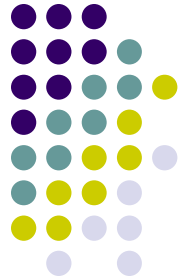
TC2 Database application is essentially CHCS developed to run on the Windows Server 2003 operating system providing **clinical inpatient functionality** to be used by Theater units.

Medical Documentation and Transactions Supported

TC2 supports the transmission of inpatient provider and nursing notes, laboratory, radiology, pharmacy, Discharge summary, Progress Notes, Consult Results, and Admission, Disposition and transfer (ADT) messages from the TC2 environment to the TMIP Framework for transmission to the Theater Medical Data Store (TMDS).

TC2>TMIP Framework>TMDS

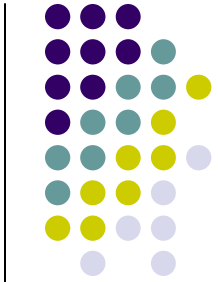
Medical Situational Awareness Information Supported



TC2 also provides bed status and patient visibility information automatically to the Theater Medical Data Store (TMDS).

This information is aggregated by the Joint Medical Workstation (JMeWs) Command and Control application for Theater operational support Decision Making

Data Transmission



TC2 uses TMIP Framework ONLY for data transmission in the Theater environment.

Theater File Sharing Capability

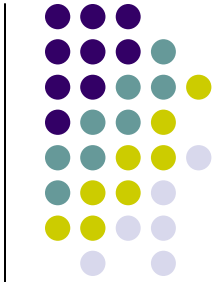
1. TC2 can generate and send a Transportable Computer-Based Patient Record (TCPR) and supply the file to the TMIP Framework for transmission to the Master Cluster Manger Service then to Landsthul Regional Medical Center (LRMC) only.

TC2 TCPR>TMIP Framework>MCMS>LRMC

2. Theater Medical Facilities with TC2 can share TCPR files.

Level 2+ Facility TCPR>TMIP Framework>TMDS>TMIP Framework> Level 3 Facility TC2 System

Internal Functional Security



As Clinical information is entered into TC2, the system will trigger Health level 7 messages to the Generic Interface System (GIS).

The GIS will transform the messages into an American Standard Code for Information Interchange (ASCII) files and transfer the files to TIMP Framework.

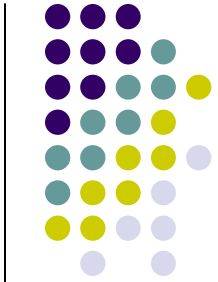
The GIS will also transfer Standard Inpatient Data Record (SIDR) records to the TMIP Framework for transmission.

Input>TC2>HL7>GIS>ASCII>TMIP Framework>TMDS

Generic Interface System (GIS) Data Transfer Responsibilities

TC2 GIS provides transaction-orientated information transfer and format processing to create, manage, and interpret Health Level 7 messages flowing between TC2 and external Systems.

TC2 Data Transfer Responsibilities



TC2 creates Health Level 7 messages as the triggering events occur, then write to an American Standard Code for Information Interchange file (ASCII) flat files on a TMIP Framework Directory Folder for later transmission to the TMDS.

Files are transmitted to the TMDS "AUTOMATICALLY" upon save.

TMIP Framework Data Transfer Responsibilities

Is responsible for all CHCS Cache' Outbound communication and transmission of patient messages, Master File Notifications, Standard Inpatient Data Reports, and Standard Ambulatory Data Reports.

Every TC2 triggered message will be written to an individual file in the designated TMIP Framework Directory.

File Generation Capability

TC2 provides the capability to generate Standard Inpatient Data Record (SIDR) files and supply them to the TMIP Framework for transmission to Patient Administration Systems and Biostatistics Activity (PASBA) in San Antonio, Texas.

TC2>TMDS>PASBA

SIDR
Standard Inpatient Data Record

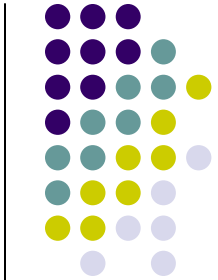
The SIDR file will include a single record for each inpatient encounter. The record will contain patient data associated with the most recent events not captured in a pervious SIDR file.

Example of event types collected:

1. Patient is admitted/discharged by a facility supported by TC2
2. Patient admission/discharge is updated or canceled by a facility supported by TC2
3. A diagnostic code is attached to a patient record.

Is created by TC2 users in accordance with local policy, usually once a MONTH during the first week

Security and Integrity

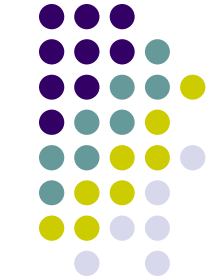


The interface between TC2 and TMIP Framework is used to send and receive Sensitive but Unclassified information.

The minimum security class determined for both TC2 and TMIP Framework is Mission Assurance Category (MAC) II, Sensitive.

TC2 application contains patient-sensitive information (PHI) and may be accessed and used by authorized personnel only. Each access is subject to recording and auditing.

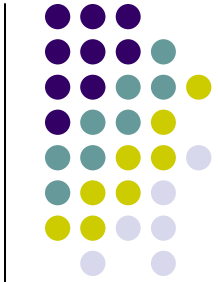
Health Level Seven Message



Health Level Seven message (HL7) requirements specifies which triggers cause which messages to be sent to which systems.

HL7 Message Definitions specifies the format and content of the messages.

System Access



The TC2 Windows Server 2003 is a secure system. You must identify yourself or log on, in order to gain entry.

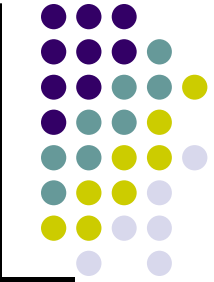
Each user is assigned an access and a verify code. In addition each user are assign security keys in according to their assignment of roles.

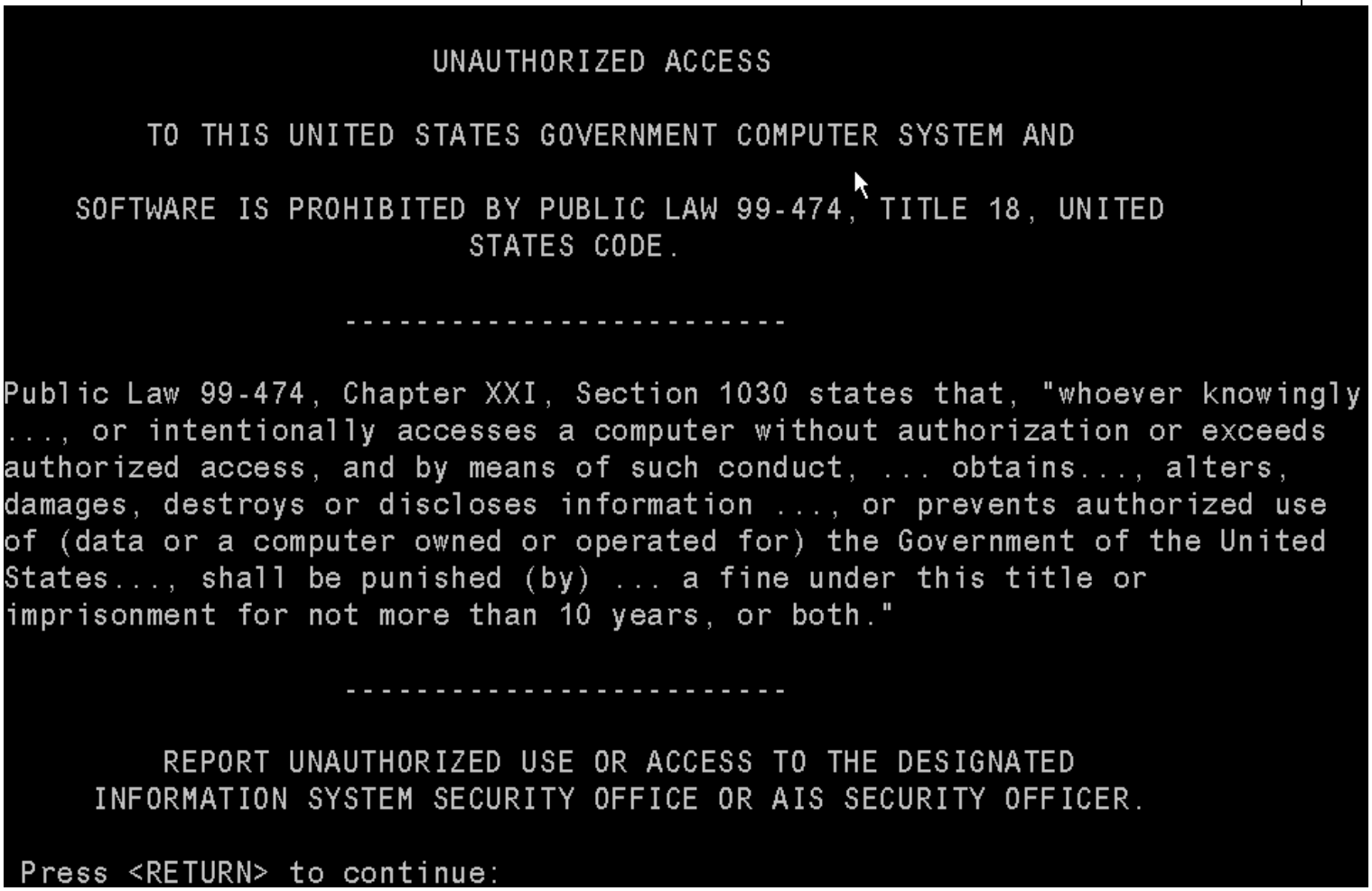
User will access all of the components required in the performance of duties granted, access to all other components will be denied.

Users can log into any terminal in their clinic

Remember that Passwords are case sensitive.

TC2 Security Screen





Windows Server and Cache' Database

Cache' begins automatically during startup process.

The status of Cache' is identified by viewing the Cache' Cube in the lower right of the system tray. Verify that the Cache' Cube is running by viewing a **BLUE** Cache' Cube. A Grey Cache' Cube indicates that the Cache' is stopped.

Telnet Access to the Cache' Database

Telnet is the most commonly used method to access CHCS. Telneting to the server will present the user with a CHCS Access and Verify prompt.

Once authenticated, the user can use CHCS. When the user halts from CHCS, their connection to the server is terminated.

Programmer Prompt Access to the Cache' Database

Programmer prompt access is used by a system administrator to perform Cache' maintenance tasks and to install TC2 packages.

The programmer prompt s accessed by using the Cache' terminal application from the server console or by using the programmer mode option from within TC2.

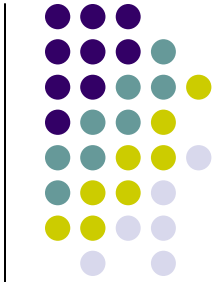
System Management Portal Access to the Cache' Database

The System Management Portal may be accessed either from the server console or from a remote PC.

The user must login as CHCSMGR to perform configuration or management operations.

The user CHCSOPR may be used to perform system monitoring and some management operations.

TC2 System backup



TC2 uses a Cache' database in a Window Server environment.

System backups are comprised of backing up the Cache' Database and backing up the TC2 Windows Server 2003 operating system using BrightStor ARCserve Backup (BAB) for Windows.

The process used to backup Cache' Databases requires NO downtime and therefore can be run while the TC2 system is in use.

TC2 backup is done daily

Cache' Database System Role

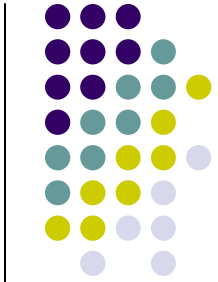
Provides **Write Image Journaling** (WIJ) and **Journaling**.

WIJ ensures database integrity in the event of software failure. There is one WIJ for the whole database.

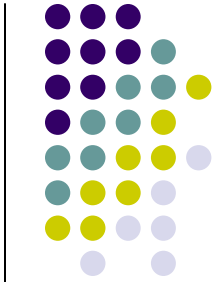
And Journaling logs for all database SETS and KILLS in the event a database recovery is necessary

Ensures NO LOST DATA

Printers and TC2



Numerous Printers may be connected to TC2



QUESTIONS ?